

**MODIS Technical Team Meeting**  
**Thursday, May 17, 2001**  
**3:00 PM**

Vince Salomonson chaired the meeting. Present were Jack Xiong, Mike Roberto, Barbara Conboy, Steve Kempler, Eric Vermote, Robert Wolfe, Skip Reber, Wayne Esaias, Michael King, and Bob Murphy, with Rebecca Lindsey taking the minutes.

## 1.0 Schedule of Upcoming Events

- Ocean Color Science Meeting May 22-24, 2001  
San Diego, CA
- MODIS Science Team Meeting (tentative dates) September 24-26, 2001  
Location: TBD

## 2.0 Meeting Minutes

## 2.1 Instrument Update

*NOTE: In the minutes from 5/10/01, the issue of gain changes and out-of-family response in Bands 1 and 2 on FM1 was incorrectly characterized as likely the result of focal plane L1 software. The issue is discussed more fully in these minutes.*

Roberto reported that issues with FM1 spacecraft components, such as the Formatter Multiplexor Unit, remain as of 5/16. These issues could impact the start of thermal vacuum testing, which is currently scheduled for July. There was further discussion of previous reports that Bands 1 and 2 are going out of family, and they are moving to a lower gain. The problem is not likely due to analog electronics since they are different in each band. It also doesn't seem to be optical because other nearby bands are OK, and these bands are close to the same frequency and bandwidth. (Band 13 overlaps Band 1, Band 16 overlaps 2, and those bands are behaving fine.) Nothing changed with Ecal, either. Two other possibilities that SBRS is looking into are the different type of capacitor used with bands 1 and 2, and the common substrate shared by these bands.

Xiong summarized a meeting at which they discussed striping in Band 26 from Band 7. At the meeting, they reviewed Chris Moeller's chart of striping on Band 26. They discussed all the different time configurations until the present, and also showed recent SRCA data results. Xiong reported that detector 10 striping is high compared to the actual channel-to-channel signal differences. MCST thinks that may be because of incomplete illumination of the focal plane during SRCA testing as opposed to earth scene data. Ultimately, they think it is a cross talk problem between 7 and 26, and they did not see a lot of thermal leak.

The striping only happens in daytime, which further implicates SWIR bands, and not the thermal bands. There is no striping over ocean scene data only, but the striping appears when there is land data in the scene.

MCST will next be looking at cross talk among Bands 5, 6, and 7. With respect to degradation of blue bands, they have decided to use the SDSM data and linear fading for Band 1. The correction this will be in the consistent-year reprocessing

Vermote mentioned that the SRCA data are showing some negative dn. Xiong said he would be sending out a plan for dealing with the issue for the team to review. He added that the problem happened in previous Vdet/ Itwk configurations.

## 2.2 GES DAC Update

Kempler reported that 5V07 is in, we had some problems with the client getting data out, but those are fixed. They are still seeing some performance hits, but they have been very busy with MOSS tests, etc., so they aren't sure there is a real problem yet. He also reported that with the Aqua MOSS test, they are testing data through the operational system for the first time. Despite some hiccups getting data in, most of the system is functional. Overall, production is going well. As far as processing capacity, for MODIS they are over 3X.

Kempler also reported that Greg Leptoukh and George Serafino are looking into the conversion of HDF-EOS to binary.

Kempler mentioned that Serafino is doing a cost estimate for the subsetting of Aqua MODIS data desired by Graeme Stevens for use by the CloudSat mission.

The GES DAAC's user working group, which is headed by Stan Morain, is meeting June 14 and 15.

Kempler also announced that Chris Lynnes of the DAAC won a center award for science and technology, and that the DAAC earned a customer service award and a teamwork award.

Esaias complimented the DAAC staff by saying that the innovation and dedication of the Goddard staff puts MODIS in a much better position than we would be without them.

## 2.3 SDST

Wolfe reported that MODAPS had not been running smoothly over the last week. They have been fighting some hardware problems having to do with the latest version of the SGI operating system not working well with the Fiber Channel hardware under heavy load. Because of this, they lost about eight percent of the data on their disks. Since most of the data had already been saved to tape only about 1 % of the data was lost. The system is now back up and running with the previous version of the operating system and the lost data is being regenerated.

The second MODAPS string is now up and running, and they have completely processed one day of data for one of the land loaders. Over the next week they will continue to check out the new system and prepare it for production. The two MODAPS strings will have more than 2x processing capacity once they are running well. The one MODAPS string did about 0.7x during the past week.

Wolfe reported that the EDC has been distributing a MODIS Level 3 reprojection tool, and they have had over 200 registered users from a variety of agencies and locations. Salomonson indicated that it would be useful to find out which projection the users seem to like most. The reprojection tool also creates flat binary output. Kempler commented that the GES DAAC is looking into attaching a binary conversion to Terra Whom.

## 2.4 MCST

Xiong reminded the group that MCST is going to be conducting a focal plane heater test that will take about 20 minutes, and will most likely be conducted over a polar area.

## 2.5 EOSDIS Update

Reber addressed the issue of HDF-EOS version 4 and 5 compatibility. He stated that there had been an attempt to make both versions compatible, but the changes in version 5 are immense. Compatibility could not be achieved. However, they are coming out with conversion tools, and there is a plan to support both versions for several years. He indicated that EOSIDS is not recommending or pressuring anyone to convert to the new version.

## 2.6 Atmosphere Update

King reported that the Atmosphere team delivered its last consistent-year PGEs today (5/17).

## 2.7 Conclusion

Salomonson reported that plans for the Terra results symposium are going forward, and that Jon Ranson is informing Diane Wickland. Otis Brown is working on costs for holding the meeting in Miami. The plan is still to have it during the first week (or the end) of January.

## 3.0 Action Items

3.1 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.

Status: Open.

3.2 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.

Status: Open.